Amdt. dated February 12, 2009

Reply to Office action of August 12, 2008

Amendments to the Specification

On page 2, after line 22, please add the following:

BRIEF DESCRIPTION OF THE DRAWINGS

The figure is a flow diagram illustrating a securing method according to the

invention.

On page 2, please replace the paragraph beginning on line 18, with the

following paragraph:

According to the invention, the method for securing a computer system by logical

confinement of data comprises separation of said data per possessor per possessor P1...Px...Pn

and their encryption with a dedicated key; this separation and encryption process is performed by

a procedure comprising the following steps (see figure):

an allocation of memory memory MAUx performed by a memory manager

memory manager MM on request from another component of the operating

system which transmits to said memory manager memory manager MM, the

identity identity Id of the requester requester Px. This requester will become the

possessor possessor Px of the allocated memory memory MAUx. Transmission of

the identity-identity Id of the requester may be accomplished either by managing a

current context, or by passing parameters to the functions of the memory manager;

a check by the aforesaid memory manager of the whole of the memory allocation

units memory allocation units MAU1-MAUn, each being associated with a

possessor a possessor P1-Pn of the memory allocation unit. Each memory

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allocation unit can only have one single possessor; nevertheless, several memory allocation units may have the same possessor:

- an encryption of the data of each possessor by means of a key associated with this possessor;
- optionally, a use of a secret associated with each possessor, by the memory
  manager. This secret may typically be provided to the memory manager by the
  operating system at the moment when the possessor is introduced into the system
  and upon each access to a memory allocation unit;
- optionally, a use of a key for each possessor by the memory manager. This key
  may for example be derived from a secret associated with the possessor and a socalled "master" key to which only the memory manager has access;
- a check of the identity identity Id of the requester by the memory manager for
  each request to access a memory allocation unit; if this identity identity Id is not
  identical with that of that Idx of the possessor of said memory allocation unit, then
  the access to the memory allocation unit memory allocation unit MAUx is refused
  by the memory manager;
- performing, by means of the memory manager, encryption (in the case of a write request) or decryption (in the case of a read request) of the relevant data with the key associated with the possessor, whereby this key may be re-calculated by the memory manager.